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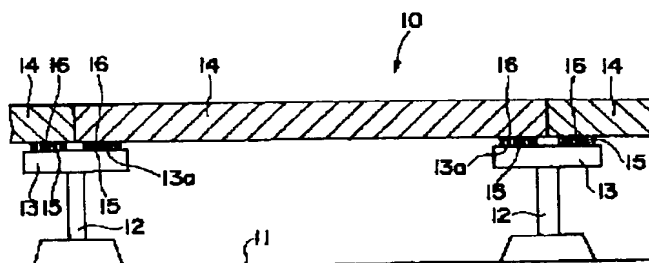
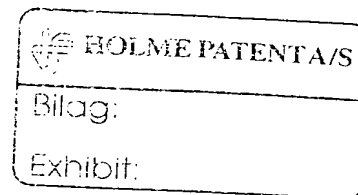
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STRUCTURE



ABSTRACT : PROBLEM TO BE SOLVED: To provide an inexpensive detachable set floor structure which can easily attach/detach a floor plate which is a finished plate, partially change the floor plate and easily check various facilities installed in an underfloor space part, and generate no floor creaking.

SOLUTION: A floor plate support surface 13a is formed on an upper part of a plurality of support legs 12 erected on a floor slab 11, a plurality of floor plates 14 having a specified surface area and consisting of a highly dense wooden fiber board which is an industrial product are placed on and supported by at least one or a plurality of the floor plate supporting surfaces 13a and when each floor plate 14 is placed on and supported by the floor plate supporting surface 13a, each floor plate 14 is fixed to the floor plate supporting surface 13a by attachable/detachable fitting means 15, 16.

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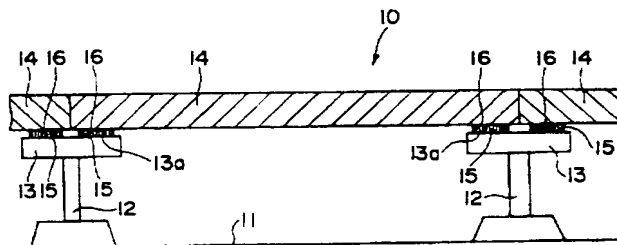
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(54) 【発明の名称】 着脱式置き床構造

(57) 【要約】

【課題】 仕上げ板である床板の着脱を容易にして、床板の部分的な交換や床下空間部に設置された種々の設備を容易に点検することができ、しかし床鳴りなどを起こすことのない安価な着脱式置き床構造を提供すること。

【解決手段】 床スラブ11に立てられた複数の支持脚12の上部に床板支持面13aを形成し、所定の面領域を有し、工業製品である高密度木質繊維板からなる複数の床板14を少なくとも1つ又は複数の床板支持面13a上に乗って支持し、各床板14を床板支持面13aに乗せて支持する時、着脱可能な取付け手段15、16、22により各床板14を床板支持面13aに対して固定することを特徴とする。



【特許請求の範囲】

【請求項1】 床スラブに立てられた複数の支持脚と、この各支持脚の上部に形成された床板支持面と、少なくとも1つ又は複数の前記床板支持面上に乗って支持され、所定の面領域を有する複数の床板と、前記各床板を前記支持面に乗せる時、前記各床板を前記床板支持面に対して着脱可能に固定する床板取付け手段とから構成されていることを特徴とする着脱式置き床構造。

【請求項2】 前記床板が、天然木材の繊維質を細かく裂き、固めて成型した高密度木質繊維板からなる木質系床板であることを特徴とする請求項1に記載の着脱式置き床構造。

【請求項3】 前記床板取付け手段が面ファスナーであり、前記各床板支持面には第1の面ファスナーが設けられ、前記各木質系床板の裏面において少なくとも前記床板支持面に対向する部分に第2の面ファスナーが取り付けられ、前記各木質系床板を前記支持面に乗せて支持させる時、前記第1及び第2の面ファスナーが貼り合わされることにより前記床板支持面に着脱可能に取り付けられることを特徴とする請求項2に記載の着脱式置き床構造。

【請求項4】 前記面ファスナーが接着布であり、この接着布を取付ける手段が機械的固定手段であることを特徴とする請求項3に記載の着脱式置き床構造。

【請求項5】 前記床板取付け手段が螺着固定手段であり、前記各木質系床板の前記床板支持面に対向する表面部分に凹部が形成され、その凹部内で前記螺着固定手段が前記床板支持面にまで到達して着脱可能に取り付けられ、前記凹部は前記螺着固定手段の取付け後に充填部材で埋められることを特徴とする請求項2に記載の着脱式置き床構造。

【発明の詳細な説明】

【0001】

【発明の属する技術分野】本発明は着脱式置き床構造に関し、更に詳細には一戸建て住宅、集合住宅又は宿泊施設等の内装において内装床を床スラブより所定寸法だけ高くして構成する着脱式置き床構造に関する。

【0002】

【従来の技術】従来、一戸建て住宅、集合住宅又は宿泊施設等では、水廻りや寝室、或いは床スラブと内装床面との間に所定寸法の空間部を形成する必要がある場所では、置き床構造が採用されることは既によく知られている。

【0003】一般に、この種の置き床構造は、図5に示されるように床スラブ1の上に複数の支持脚2を並べ、これら複数の支持脚2で支持するようにその上に下地床3を取り付け、この下地床3の表面に仕上げ板（実際の床板）4を固定して構成されていた。これらの構成要素である支持脚2、下地床3及び仕上げ板4は相互に釘やネジ類、或いは接着剤類などによって固定されるのが

一般的であった。

【0004】下地床3としてはパーティクルボードや合板などが使用され、また仕上げ板4としては化粧合板や自然木の無垢板などが使用される。時には、仕上げ板4に代えて絨毯又は樹脂系のシートが使用されることもある。特に、仕上げに絨毯又は樹脂系のシートが使用される場合には、下地床3を2重とすることが多い。

【0005】

【発明が解決しようとする課題】しかしながら、このような従来の置き床構造では、下地床3が支持脚2に釘やネジで堅固に固定され、また仕上げ板4はこの下地床3に釘や、ネジ又は接着剤等で堅固に固着されているので通常であるため、例えば床スラブ1と下地床3との間の空間部6に配置される配管や配線などの設備類を点検する必要が出てきた場合に、下地床3や仕上げ板4の着脱が容易ではないため、この空間部6を開けて点検作業をすることが非常に困難であるという問題があった。

【0006】従来では、所謂床下の点検が必要となりやすい箇所（室）等の床には、部分的に床板を扉のように開けて床下空間部を覗ける点検口を設置することもあるが、このような点検口を設置する場合には、開口部を金属製のフレームで縁取りするなど特別な構造とするため相当な費用が掛かることや、施工性や意匠性の面で不利となったり或いは点検部の移動には対処できない等の問題があった。

【0007】このようなことから、従来では、仕上げ板を下地板の上に単に置くだけとして、必要な部分をいつでも取り外しできるようにすることが提案されたが、がたつきなど問題を生じるため実施は難しいと考えられていた。

【0008】また、下地材を省略し、その分厚い仕上げ材のみとすることもあり、その場合は仕上げ板が自然木の無垢材から形成されたものとするものが多く、コストが高くなることや、寸法のばらつき、ゆがみ、経年による変形や摩耗が生じやすく、そのため床鳴りなどを招く恐れがあるという問題もあった。更に、従来の下地材や仕上げ材は、ホルムアルデヒドを排出することが多く、そのために健康に対して好ましくないという問題もあった。

【0009】本発明の目的は、かかる従来の問題点を解決するためになされたもので、仕上げ板である床板の着脱を容易にして、床板の部分的な交換や床下空間部に設置された種々の設備を容易に点検することができ、しかも床鳴りなどを起こすことのない安価な着脱式置き床構造を提供することにある。

【0010】

【課題を解決するための手段】本発明は着脱式置き床構造であり、前述した技術的課題を解決するために以下のように構成されている。すなわち、本発明の着脱式置き床構造は、床スラブに立てられた複数の支持脚と、この

各支持脚の上部に形成された床板支持面と、少なくとも1つ又は複数の床板支持面上に乗って支持され、所定の面領域を有する複数の床板と、各床板を支持面上に乗せる時、各床板を床板支持面に対して着脱可能に固定する床板取付け手段とから構成されていることを特徴とする。

【0011】<本発明における具体的構成>本発明の着脱式置き床構造は、前述した必須の構成要素からなるが、その構成要素が具体的に以下のような場合であっても成立する。その具体的構成要素とは、床板が、天然木材の繊維質を細かく裂き、固めて成型した高密度な木質繊維板からなる木質系床板であることを特徴とする。

【0012】また、本発明の着脱式置き床構造では、床板取付け手段が面ファスナーであり、各床板支持面には第1の面ファスナーが設けられ、各木質系床板の裏面において少なくとも床板支持面に対向する部分に第2の面ファスナーが取り付けられ、各木質系床板を支持面上に乗せて支持させる時、第1及び第2の面ファスナーが貼り合わされることにより床板支持面に着脱可能に取り付けられることを特徴とする。

【0013】また、本発明の着脱式置き床構造では、面ファスナーを接着布等で構成することが好ましい。更に、接着布等の取付け手段としては機械的固定手段、例えばネジ又はボルト等を含む螺着固定手段を用いることが好ましい。

【0014】このような特徴を備える本発明の着脱式置き床構造によると、仕上げ板である床板は複数の支持脚における各上部に形成された床板支持面上に乗せられて支持されており、その際、床板は面ファスナーのような着脱自在な床板取付け手段により床板支持面に固着されている。また、面ファスナー自体はビス又はボルト等の機械的固定手段により仕上げ板である床板や床板支持面に取り付けられる。

【0015】これにより、床板の交換又は床下空間に配設した設備の点検などのために床板を取り外す場合には、所定箇所の床板を床板支持面から所定の力で引き上げれば、床板と床板支持面とを相互固着している面ファスナー同士が離れて取り外すことができる。また、繰返し着脱しても面ファスナー自身が損傷することもない。

【0016】更に、床板取付け手段としては、各木質系床板の床板支持面に対向する表面部分に凹部を形成し、その凹部内でネジ又はボルトを床板支持面にまで到達させて着脱可能に取り付ける構成とすることができる。その場合、凹部は、最終的に充填部材で埋めることが好ましい。高密度繊維板により形成される前述した木質系床板は、従来の仕上げ床と下地板の機能を合わせ持つことが好ましい。更に高密度繊維板は、予めその底部を銅板等で補強してもよい。

【0017】

【発明の実施の形態】以下、本発明の着脱式置き床構造を図1に示される実施形態について更に詳細に説明する。

図1には本発明の一実施形態に係る着脱式置き床構造10が示されている。この着脱式置き床構造10は、基本的には、床スラブ11に複数の支持脚12が立てられ、この各支持脚12の上部に形成された床板支持部13の平坦な上面13aに所定の面領域を備える床板14を乗せて構成されている。

【0018】この実施形態に係る着脱式置き床構造10で使用される床板は、天然木材の繊維質を細かく裂き、固めて成型した木質繊維板、特に細かく裂いた天然木材の繊維質を高密度に固めて成型した高密度木質繊維板（HDF板：ハイデンシティーファイバー板）で構成されている。従って、この床板14を木質系床板と称する。

【0019】図1に示される実施形態の着脱式置き床構造10では、木質系床板14を支持する床板支持部13が支持脚12の横断面積より大きい面積の平坦な上面13aを備えているが、床板支持部13と支持脚12は一体に形成されていてもよいし、或いは別体に形成されていてもよい。

【0020】また、支持脚12それ自体を横断面積が大きなものを使用することができ、その場合には、その支持脚の平坦な上面が床板支持面として直接利用できるので、図1に示されるような形状の床板支持部13を特に設ける必要はない。この実施形態では、木質系床板14は方形状を呈し、ある床板支持部13の平坦な上面13aの面積は、図2に示されるように縦横に配列された多数の方形状木質系床板14の角部集合部が乗る大きさとされている。

【0021】すなわち、この場合の床板支持部13の平坦な上面13aは、縦横に配列された多数の方形状木質系床板14において4つの角部が突き合された角部集合部の中心点が上面13aのほぼ中心に位置するように乗せられて4つの木質系床板14の各コーナー部をほぼ均等に支持する大きさとされている。

【0022】勿論、このような大きさの上面13aを備える床板支持部13は一例であって、多数の方形状木質系床板14の配列に対する支持脚12の設置位置により上面13aの大きさは適宜設計でき、また多数の方形状木質系床板14を床板支持部13の上面13aへ乗せて支持する際の乗せ方も同様に適宜設定できることはいうまでもない。

【0023】このように床板支持部13の平坦な上面13aが、4つの木質系床板14の各コーナー部をほぼ均等に乗せて支持するような場合、その上面13aには、四角形状をした4つの第1の面ファスナー15が図2に示されるように4つの各床板のコーナー部の裏面に対向する位置に取り付けられている。

【0024】他方、この床板支持部13の平坦な上面13aに乗せられて支持される4つの木質系床板14の各コーナー部裏面にも、別な第2の面ファスナー16が取

いのものであったが、本発明はこのような方形状の木質系床板を配列する場合に限定されるものではなく、短冊状の床板を床板支持部の上面に乗せて置き床構造とすることもできる。

【0031】また、前述した各実施形態に係る着脱式置き床構造では、木質系床板を支持する床板支持部の上面が、4つの木質系床板の各コーナー部をほぼ均等に支持する場合について説明したが、更にこれらの床板支持部に加えて適所に床板を支持する床板支持部を支持脚によって設置してもよいことはいうまでもない。

【0032】更に、各実施形態に係る着脱式置き床構造では、床板として天然木材の繊維質を細かく裂き、この繊維質を高密度に固めて成型した高密度木質繊維板からなる木質系床板を用いた例についてのものではあったが、このような高密度木質繊維板は耐変形性があることから耐久性があり、且つこれが工業製品であることから寸法の安定性も高い等の理由から好ましい材料ではあるが、本発明はこれに限定されるものではない。

【0033】なお、本発明の置き床構造では、前述したように床板を支持脚の上部に形成された床板支持面に乗せると共に面ファスナーや螺着固定手段により着脱可能に取り付けるようにしたことから、床板の側面に嵌合用の凹凸を形成するなどして行う床板相互の本実継ぎの必要はない。また、本発明の置き床構造において、これを施工する室の周縁部（壁際）の一部は支持脚の床板支持面に床板を釘やネジ類で堅固に固定しておくことが好ましい。

【0034】

【発明の効果】以上説明したように、本発明の着脱式置き床構造によれば、床板を支持脚の上部に形成された床板支持面に着脱可能に取り付けるようにしたこと、床板の部分的な交換や床下空間部に設置された種々の設備を容易に点検することができ、しかも通常は床板支持面に堅固に固着されているためがたつき、きしみ等がなく、従って床鳴りなどを起こすことのない安価な着脱式置き床構造を提供することができる。

【0035】また、本発明の着脱式置き床構造によれば、床板の表面に傷が付いたり床下空間部に設置した設備の点検修理等の際に床板の固定に面ファスナーを使用しているためその取り外しも非常に容易であることから、交換作業に労力が掛からず、この種の修繕を安価に且つ短期間に行うことができる。更に、本発明の着脱式置き床構造によれば、ホルムアルデヒドの排出を極めて少ないものとでき、そのため健康に対して好ましいものとなる。

【図面の簡単な説明】

【図１】本発明の一実施形態に係る着脱式置き床構造を示す断面図である。

【図2】図1に示される着脱式置き床構造における床板支持部の配置状態を上方から示す平面図である。

【図3】本発明の他の実施形態に係る着脱式置き床構造を部分的に示す断面図である。

【図4】図1に示された着脱式置き床構造における床板の一部を拡大して示す断面図である。

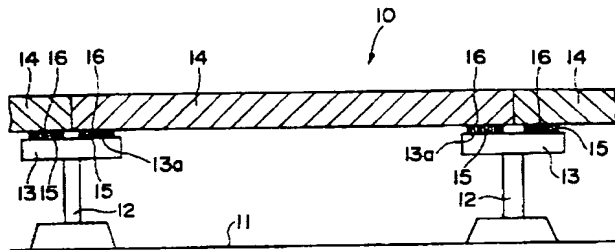
【図5】従来の置き床構造を概略的に示す断面図である。

【符号の説明】

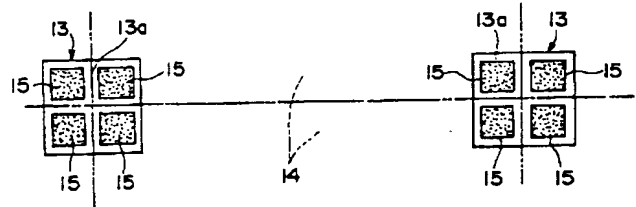
10 着脱式置き床構造
11 床スラブ
12 支持脚

13 床板支持部
13a 床板支持部の上面
14 床板
15 面ファスナー（第1の面ファスナー）
16 面ファスナー（第2の面ファスナー）
20 着脱式置き床構造
21 凹部
22 ネジ
23 埋木（充填部材）

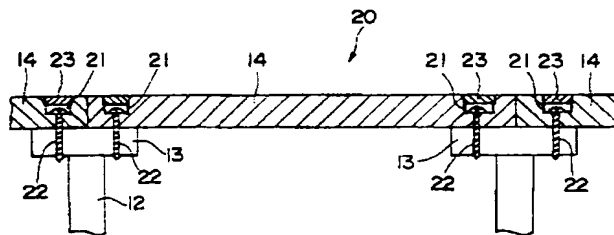
【図1】



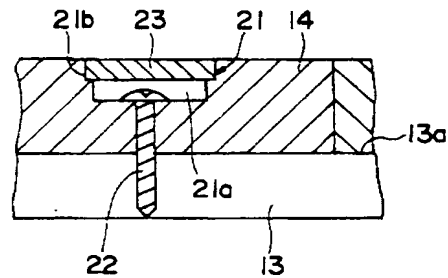
【図2】



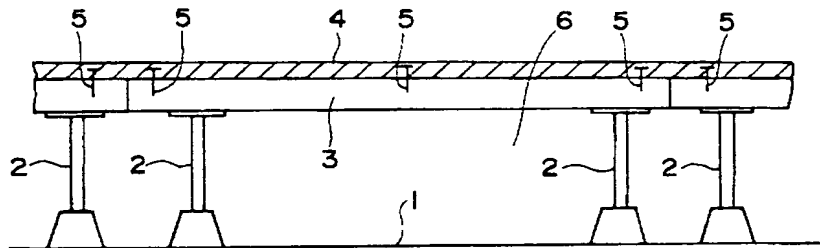
【図3】



【図4】



【図5】



フロントページの続き

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1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. **** shows the word which can not be translated.
3. In the drawings, any words are not translated.

DETAILED DESCRIPTION

[Detailed description]

[0001]

[The technical field to which invention belongs] this invention relates to floor structure every [in which only a predetermined dimension carries out an interior floor highly, and constitutes it from floor slab in interiors, such as a single-family house, an apartment house, or an accommodation, still in detail about floor structure every attachment-and-detachment formula] attachment-and-detachment formula.

[0002]

[Prior art] Conventionally, it is already well known for the single-family house, the apartment house, or the accommodation in *****, a bedroom, or the location with the need of forming the space section of a predetermined dimension between floor slab and an interior floor line that will place and floor structure will be adopted.

[0003] generally, this kind places, floor structure arranges two or more support saddles 2 in on the floor slab 1, as shown in drawing 5, and it supports them by the support saddle 2 of these pluralities -- as -- a it top -- a subfloor -- 3 is attached, and it finished on this front face of subfloor 3, and a plate (actual floor plate) 4 is fixed and it was constituted the support saddle 2 which are these components, and a subfloor -- as for 3 and the finishing plate 4, it was common that a nail 5, screws or adhesives, etc. was fixed mutually

[0004] Particle board, a plywood, etc. are used as subfloor 3, and a fancy plywood, the pure plate of a natural tree, etc. are used as a finishing plate 4. Occasionally, it replaces with the finishing plate 4 and the sheet of a carpet or a resin system may be used. the case where the sheet of a carpet or a resin system is especially used for finishing -- a subfloor -- 3 is doubled in many cases

[0005]

[Object of the Invention] Such former places. however, with floor structure Since subfloor 3 is strongly fixed to a support saddle 2 with a nail or a screw and the finishing plate 4 fixes strongly with a nail 5, a screw, or adhesives in this subfloor 3, it usually comes out. A certain sake, for example, the floor slab 1 and a subfloor -- the case where the need of checking the facilities arranged at the space section 6 between 3, such as piping and a wiring, comes out -- a subfloor -- there were 3 and a problem that finish. and it was very difficult to open this space section 6 and to carry out check work since attachment and detachment of a plate 4 are not easy

[0006] Although the inspection post which opens a floor plate like a door partially and can peep into the underfloor space section may be installed in floors, such as a part (**) for which check of the so-called under floor tends to be needed, in the former In installing such an inspection post, in order to consider as special structures, such as bordering opening with a metal frame, there was a problem of the grade which cannot become disadvantageous in respect of that a considerable cost starts, a workability, or design nature, or cannot cope with a move of the check section.

[0007] Since it was such. although only supposing that it is to only place a finishing plate on a sheeting, and enabling it to always remove a required fraction was proposed by the former, in order to produce problems, such as shakiness, it was thought that enforcement was difficult.

[0008] Moreover, since substratum material was omitted and it considered only as that much thick finishing material, there was also a problem that there was a possibility of being easy to produce the deformation and wear by the finishing plate having been formed in many cases from the pure

material of a natural tree in that case, and a cost becoming high, dispersion of a dimension, distortion, and many years past, therefore inviting ***** etc. Furthermore, conventional substratum material and conventional finishing material discharged formaldehyde in many cases, for the reason, received healthily and also had the problem are not desirable.

[0009] The purpose of this invention was able to be made in order to solve such a conventional trouble, it can make easy attachment and detachment of the floor plate which is a finishing plate, can check easily the various facilities installed in partial exchange of a floor plate or underfloor space circles, and is to offer floor structure every [which moreover does not start ***** etc.] cheap attachment-and-detachment formula.

[0010]

[The means for solving a technical problem] this invention is floor structure every attachment-and-detachment formula, and in order to solve the technical technical problem mentioned above, it is constituted as follows. That is, it is characterized by floor structure consisting of a floor plate anchoring means to fix each floor plate removable to a floor plate back face, every attachment-and-detachment formula of this invention, when putting two or more floor plates which ride on one or more floor plate back faces at least with two or more support saddles stood to floor slab, and the floor plate back face formed in the upper part of each of this support saddle, are supported, and have a predetermined field field, and each floor plate on a back face.

[0011] Every attachment-and-detachment formula of a <concrete configuration in this invention> this invention, although floor structure consists of an indispensable component mentioned above, even if the component is in the following cases concretely, it is materialized. It is characterized by the concrete component being a woody system floor plate with which a floor plate consists of a high-density woody fiber plate which tore the fiber of natural wood finely, hardened it and cast it.

[0012] Moreover, with floor structure, a floor plate anchoring means is a field fastener every attachment-and-detachment formula of this invention. The 1st field fastener is formed in each floor plate back face, and the 2nd field fastener is attached in the fraction which counters a floor plate back face at least in the rear face of each woody system floor plate. When making a back face put and support each woody system floor plate, it is characterized by being attached in a floor plate back face removable by sticking the 1st and 2nd field fasteners.

[0013] Moreover, it is desirable to constitute a field fastener from floor structure by the bonded fabric etc. every attachment-and-detachment formula of this invention. Furthermore, it is desirable to use the ** arrival fixed means which contains a mechanical fixed means, for example, a screw, or a bolt as anchoring meanses, such as a bonded fabric.

[0014] Every attachment-and-detachment formula of this invention equipped with such a characteristic feature, according to floor structure, the floor plate which is a finishing plate is put on the floor plate back face formed in each upper part in two or more support saddles, and is supported, and the floor plate fixes it in the floor plate back face by the floor plate anchoring means in which attachment and detachment like a field fastener are free in that case. Moreover, the field fastener itself is finished by mechanical fixed meanses, such as a screw or a bolt, and it is attached in the floor plate and floor plate back face which are a plate.

[0015] If the floor plate of a predetermined part is pulled up from a floor plate back face by the predetermined force when this removes a floor plate for check of the facility which ***** to exchange of a floor plate or the underfloor space etc., the field fasteners which are carrying out mutual fixing can leave and remove a floor plate and a floor plate back face. Moreover, even if it detaches repeatedly, the field fastener itself is not damaged.

[0016] Furthermore, it can consider as the configuration which form a concavity in the surface fraction which counters the floor plate back face of each woody system floor plate, and a screw or a bolt is made to reach even a floor plate back face within the concavity, and attaches removable as a floor plate anchoring means. In this case, as for a concavity, burying by the restoration component finally is desirable. As for the woody system floor plate which is formed with a high-density fiberboard and which was mentioned above, it is desirable to have the function of the conventional finishing floor and a sheeting. Furthermore, a high-density fiberboard may reinforce the pars basilaris ossis occipitalis with a steel plate etc. beforehand.

[0017]

[Gestalt of implementation of invention] Hereafter, floor structure is explained still in detail about the enforcement gestalt shown in drawing every attachment-and-detachment formula of this invention. The floor structure 10 is shown in drawing 1 every [concerning the 1 enforcement gestalt of this invention] attachment-and-detachment formula. Every attachment-and-detachment formula of this, fundamentally, two or more support saddles 12 are stood to the floor slab 11, and the floor structure 10 puts the floor plate 14 which equips with a predetermined field flat top 13a of the floor plate support section 13 formed in the upper part of each of this support saddle 12, and is constituted.

[0018] The floor plate used with the floor structure 10 every [concerning this enforcement gestalt] attachment-and-detachment formula consists of a woody fiber plate which tore the fiber of natural wood finely, hardened it and cast it, and a high-density woody fiber plate (HDF plate:Heiden city fiber plate) which hardened the fiber of the natural wood torn especially finely with high density, and cast it. Therefore, this floor plate 14 is called a woody system floor plate.

[0019] Every attachment-and-detachment formula of the enforcement gestalt shown in drawing 1 , with the floor structure 10, although the floor plate support section 13 which supports the woody system floor plate 14 is equipped with top 13a with a flat area larger than the cross sectional area of a support saddle 12, the floor plate support section 13 and the support saddle 12 may be formed in one, or may be formed in another field.

[0020] Moreover, since what has a big cross sectional area can be used and the flat top of the support saddle can carry out direct use of support-saddle 12 itself as a floor plate back face in that case, it is not necessary to form especially the floor plate support section 13 of a configuration which is shown in drawing 1 . With this enforcement gestalt, the woody system floor plate 14 presents the shape of a rectangle, and let area of flat top 13a of a certain floor plate support section 13 be the size on which the corner set section of the rectangle-like wood quality system floor plate 14 of the masses arranged in all directions as shown in drawing 2 rides.

[0021] That is, let the central point of the corner set section where four corners were compared in many rectangle-like wood quality system floor plates 14 with which flat top 13a of the floor plate support section 13 in this case was arranged in all directions be the size of top 13a which is put so that it may be mostly located in a center, and supports almost equally each corner section of four woody system floor plates 14.

[0022] Of course, the floor plate support section 13 equipped with top 13a of such a size is an example, and it cannot be overemphasized that how to put at the time of the installation position of the support saddle 12 to the array of many rectangle-like wood quality system floor plates 14 being able to design the size of top 13a suitably, and putting many rectangle-like wood quality system floor plates 14 on top 13a of the floor plate support section 13, and supporting them can be set up suitably similarly.

[0023] Thus, it is attached in the position which counters the rear face of the corner section of each four floor plates as the 1st four field fastener 15 which made the square configuration the top 13a is shown in drawing 2 , when flat top 13a of the floor plate support section 13 puts almost equally each corner section of four woody system floor plates 14 and supports it.

[0024] Also at on the other hand, each corner section rear face of four woody system floor plates 14 which are put on flat top 13a of this floor plate support section 13, and are supported As 2nd another field fastener 16 is attached and each corner section of four woody system floor plates 14 mentioned above in flat top 13a of the floor plate support section 13, when being put and supported, The 1st field fastener 15 with which the 2nd field fastener 16 prepared in the rear face of the corner section of each woody system floor plate 14 counters will be pasted, and each woody system floor plate 14 will be fixed to the floor plate support section 13. These field fasteners 15 and 16 can illustrate that in which it is a bonded fabric made from a resin, and self is attached by mechanical solid meanses, such as a bolt and a screw.

[0025] Such every attachment-and-detachment formula, according to the floor structure 10, when it is put on top 13a of the floor plate support section 13 prepared in the upper part of the support saddle 12 stood to the floor slab 11 and it is supported, the 2nd field fastener 16 prepared in the rear face of the 1st field fastener 15 and each woody system floor plate 14 established in this top 13 ****s and fixes each woody system floor plate 14 mutually. Therefore, there is also no possibility that

shakiness may happen and it is firmly fixed to the floor plate support section by deformation, wear, etc. according [each woody system floor plate 14] to dispersion in a dimension, distortion, and many years past. Moreover, since it becomes the junction to a field and a field also at the time of construction, it is easy to permit a construction error.

[0026] If it pulls up each woody system floor plate 14 from top 13a of the floor plate support section 13 by the predetermined force when the need that a blemish etc. attaches and exchanges for these woody system floor plates 14 comes out, or in performing check and a repair of the facility installed in the underfloor space section, **** of the mutual field fasteners 15 and 16 can separate and remove.

[0027] The floor structure 20 is shown in drawing 3 and drawing 4 every [concerning other enforcement gestalt of this invention] attachment-and-detachment formula. With the floor structure 20, the floor plate anchoring means which replaces with the field fastener used with the above-mentioned enforcement gestalt, and consists of a ** arrival fixed means is used every [concerning this enforcement gestalt] attachment-and-detachment formula. A screw or a bolt can be mentioned as this ** arrival fixed means.

[0028] Every [using / such a ** arrival fixed means] attachment-and-detachment formula, with the floor structure 20, a concavity 21 is formed in the surface fraction which counters top 13a of the floor plate support section 13 of each woody system floor plate 14, and the screw 22 which is a ** arrival fixed means within the concavity 21 reaches even the floor plate support section 13, and is attached removable. This concavity 21 is fill uped with **** 23 which is a restoration component after fixation of the woody system floor plate 14 by the screw 22.

[0029] Every attachment-and-detachment formula of this enforcement gestalt, with the floor structure 20, a base side is set to hole 21a of a minor diameter, and the opening side is formed in hole 21b of a major diameter as a concavity 21 is expanded to two steps, i.e., drawing 4, and is shown. After that, a screw 22 is attached so that the head may be settled in hole 21a of a minor diameter, it is the diameter same as a restoration component as hole 21b of a major diameter, and **** 23 of the same height dimension is inserted in hole 21b of a major diameter, and it is closed. Thereby, the front face of the woody system floor plate 14 becomes flat, and a problem does not arise at all in design.

[0030] every [concerning each enforcement gestalt mentioned above] attachment-and-detachment formula, with floor structure, although it was ** just when a woody rectangle-like system floor plate was arranged in all directions. this invention cannot be limited when arranging the woody system floor plate of the shape of such a rectangle, it can put and put a strip-of-paper-like floor plate on the top of the floor plate support section, and can also make it floor structure

[0031] Moreover, although floor structure explained the case where the top of the floor plate support section which supports a woody system floor plate supported almost equally each corner section of four woody system floor plates, every [concerning each enforcement gestalt mentioned above] attachment-and-detachment formula, it cannot be overemphasized that the floor plate support section which supports a floor plate may be further installed in a proper place by the support saddle in addition to these floor plate support sections.

[0032] Furthermore, every [concerning each enforcement gestalt] attachment-and-detachment formula, with floor structure, although it was a thing about an example using the woody system floor plate which consists of a high-density woody fiber plate which tore the fiber of natural wood finely, hardened this fiber with high density and cast it as a floor plate Since such a high-density woody fiber plate has deformation resistance, it is durable, and although it is a desirable material from the grounds, like the stability of a dimension is also high since this is an industrial product, this invention is not limited to this.

[0033] In addition, since it was made to attach by the field fastener or the ** arrival fixed means removable while the floor plate was put on the floor plate back face formed in the upper part of a support saddle, as this invention placed and having been mentioned above with floor structure, there is no need for the **** splice between floor plates performed by making it the side face of a floor plate to form the irregularity for fittings etc. Moreover, as for a part of circumference section (in the wall case) of ** which this invention places and constructs this in floor structure, it is desirable to fix a floor plate to the floor plate back face of a support saddle strongly at a nail or screws.

[0034]

[Effect of the invention] From having attached the floor plate in the floor plate back face formed in the upper part of a support saddle removable every attachment-and-detachment formula of this invention according to floor structure, as explained above Floor structure can be offered every [which the various facilities installed in partial exchange of a floor plate or underfloor space circles can be checked easily, it shakes since it moreover usually fixes strongly in the floor plate back face. and there is no jarring etc., therefore does not start ***** etc.] cheap attachment-and-detachment formula.

[0035] Moreover, since the field fastener is used for fixation of a floor plate in the cases, such as a check repair of the facility which the blemish was attached on the surface of the floor plate, or was installed in the underfloor space section, and the removal is also very easy every attachment-and-detachment formula of this invention according to floor structure, an effort cannot be applied to exchange work but repair of this kind can be performed cheaply for a short period of time.

Furthermore, every attachment-and-detachment formula of this invention, according to floor structure, issue of formaldehyde can be performed with a very few thing, therefore it will become desirable to health.

[Translation done.]

